**Group 9 – Rain, Beth, Nicole and Sans**

Exploring the change in global temperatures from the 1900s to 2013 by hemisphere and to see if the world population has a direct co-relation to it

**Questions to be answered:**

By calculating the average yearly temperature movements in the last 10 or 11 decades, we’re aiming to discover:

1. What’s the global average yearly temperature movements over the last 10 or 11 decades?
   1. *Assumption: The global average yearly temperature has increased*
2. Is there a correlation between global population growth and temperature rise?
3. If the temperature movements across the last 10 or 11 decades were different between the Northern and Southern hemisphere.
4. Which are the top 10 countries that experienced the maximum average yearly temperature shifts?
   1. *With the highest temperature rise and looking for any causes or any policies they have adopted.*
5. Which are the bottom 10 countries that had the least change in average yearly temperatures?
6. Looking at Australia, what’re the changes in yearly temperature in the last 10 or 11 decades?
7. Compare between Melbourne and Sydney, are there differences between the movements of average yearly temperature?
8. *Bonus: Could we discover the regression model for Melbourne’s average yearly temperature? By using past average yearly temperatures and to predict the temperature in the past two years and maybe compare it with the actual yearly temperature for Melbourne.*

**Data source:**

* Kaggle – Global Land Temperature
* API will be used to source world population information

**Graphs:**

* Scatter plots
* Line graphs
* Heat maps